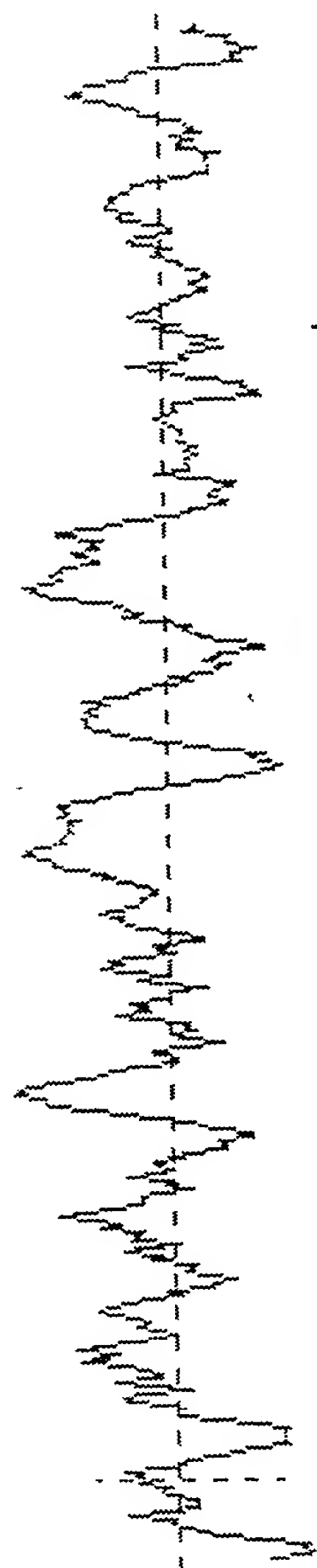


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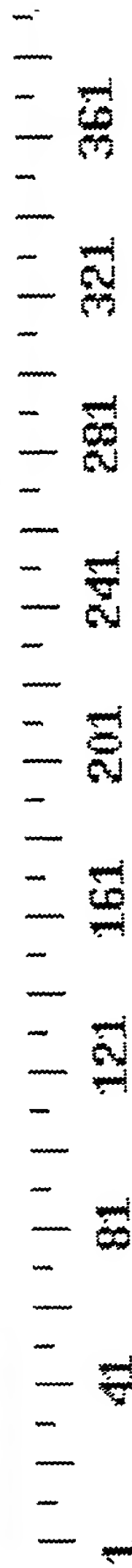


Figure 1

[illegible]

## Figure 2

CLUSTAL W (1.74) multiple sequence alignment

```

Fbh56201pat -----
hSCN4A      MARPSLCTLVPLGPECLRPFTRESLAAIEQRAVEEEARLQRNKQMEIEEPERKPRSDLEA

Fbh56201pat -----
hSCN4A      GKNLPMIYGDPPPEVIGIPLDLDPYYSNKKTFIVLNKGKAIFRFSATPALYLLSPFSV

Fbh56201pat -----
hSCN4A      RRGAIKVLIHALFSMEIMITILTNCVFM TMSDPPPWSKNVEYTF TGIYTFESLIKILARG

Fbh56201pat -----
hSCN4A      FCVDDFTFLRDPWNWLD FSVIMMAYLTEFVDLGNISALRTFRVLRALKTITVIPGLKTIV

Fbh56201pat -----
hSCN4A      GALIQSVKKLSDVMI LTVFCLSVFALVGLQLFMGNLRQKCVRWPPPFNDTNTTWYSNDTW

Fbh56201pat -----
hSCN4A      YGNDTWYGNEMWYGND SWYANDTWNSHASWATNDTFDWDAYISDEGNFYFLEGSNDALLC

Fbh56201pat -----
hSCN4A      GNSSDAGHCPQGYECI KTGRNPNYGYTSYDTFSWAFLALFRLMTQDYWENLFQTLTRAAG

Fbh56201pat -----
hSCN4A      KTYMIFVVIIFLGSFY LINLILAVVAMAYAEQNEATLAEDKEKEEEFQQMLEKFKKHQE

Fbh56201pat -----
hSCN4A      ELEKAKAAQALEGGEAD G DPAHGKDCNGSLDTSQGEKGAPRQSGSGDSGISDAMEEELEEA

Fbh56201pat -----
hSCN4A      HQKCPPWWYKCAHKVLI WNCCAPWLKFKNIIHLIVMDPFVDLGITICIVLNTLFMAMEHY

Fbh56201pat -----
hSCN4A      PMTEHFDNVLTVG NLVFTGIFTAEMVLKLIAMDPEYEFQQGWNIFDSIIIVTLSSLVELGLA

Fbh56201pat -----
hSCN4A      NVQGLSVLRSFRLLRV FKLAKSWPTLNMLIKIIGNSVGALGNLTLVLAIIVFIFAVVGMQ

Fbh56201pat -----
hSCN4A      LFGKSYKECVCKIALDC NLPRWHMHDFH SFLIVFRILCGEWIETMWDCMEVAGQAMCLT

Fbh56201pat -----
hSCN4A      VFLMVMVIGNLVVLNL FLALLSSFSADSLAASDEDGEMNNLQIAIGRIKLGIGFAKAFL

Fbh56201pat -----

```

Figure 3 (1 of 3)

```

hSCN4A      LGLLHGKILSPKDIMLSLGEADGAGEGGETAPEDEKKEPPEEDLKKDNHILNHMGLA

Fbh56201pat
hSCN4A      -----
            DGPPSSLELDHLNFINNPYLTIQVPIASEESDLEMPTEEETDTFSEPEDSKKPPQPLYDG

Fbh56201pat
hSCN4A      -----
            NSSVCSTADYKPPEEDPEEQAEENPEGEQPEECFTEACVQRWPCLYVDISQGRGKKWWTL

Fbh56201pat
hSCN4A      -----
            RRACFKIVEHNWFETFIVFMILLSSGALAFEDIYIEQRRVIRTILEYADKVFTYIFIMEM

Fbh56201pat
hSCN4A      -----
            LLKWVAYGFKVYFTNAWCWLDLFLIVDVSIIISLVANWLGYSELGPIKSLRTLRLRPLRAL

Fbh56201pat
hSCN4A      -----
            SRFEGMRVVVKPLLGAIPSIMNVLLVCLIFWLIFSIMGVNLFAGKFYYCINTTTSERFDI

Fbh56201pat
hSCN4A      -----
            SEVNNKSECESLMHTGQVRWLVNVKVNVDNVGLGYLSLLQVATFKGWMDIMYAAVDSREKE

Fbh56201pat
hSCN4A      -----
            EQPQYEVNLYMYLYFVIFIIIFGSFFTLNLFIGVIIDNFNQKKKLGGKDI FMTEEQKKYY
                                     :.      :.      ..

Fbh56201pat
hSCN4A      -----
            VDTTSVGFCPTFKKFKRNDDECRAFVKRVIMSRFFKI IMISTVTSNAFFMALWTSYDIRY
            NAMKKLGSKKPQKPIPRPQNKIQGMVYDLVTKQAFDITIMILICLNMVTMMVETDDQSQL
            ...*      . * : * :: :.* :: : * . * : * . : :

Fbh56201pat
hSCN4A      -----
            RLFRLLEFSEIFFVSICTSELSMKVYVDPINYWKNNGYNLLDVIIIIVMFLPYALRQLMGK
            KVDILYNIN-MIFIIFTGECVLKMLALRQYYFTVGWNIFDFVVLISIVGLALSDLIQK
            :: * ::. ::*: * *. * ::* .      *:. *::*:*.::*: : : ** :*: *

Fbh56201pat
hSCN4A      -----
            QFT--YLYIADGMQSLRILKLIGYSQGIRTLITAVGQTVYTVASVLLLLFLLMYIFAIL
            YFVSPTLFRVIRLARIGRVLRLIRGAKGIRTLLEFALMMSLPALFNIGLLLFLVMFIYSIF
            * .      : :      : *::** :*****: * : : : : : *****:*.::*:

Fbh56201pat
hSCN4A      -----
            GFCLFG----SPDNGDHDNWGNLAAAFFTLFSLATVDGWT-----DLQKQLDN
            GMSNFAYVKKESGIDDMFNFETFGNSIICLFEITTSAGWDGLLNPILNSGPPDCDPNLEN
            *: . *.      ... . * * : ... ::*::*: * *      * : :*: *

Fbh56201pat
hSCN4A      -----
            R--EFALSRAFTIIFILLASFIFLNMFGVMIMHTEDSIRKFERELMLEQQEMLMGEKQV
            PGTSVKGDCGNPSIGICFFCSYIIISFLIVNMYIAIILENFN--VATEESSEPLGEDDF
            .. . . . * * : . : : * : * : * : : : : : * : . . :*.::*:

Fbh56201pat
hSCN4A      -----
            ILQRQQEEISRLMHIQKNADCTSFSSELVENFKKTLSTHDPMLVDDFGTSLPFIDIY-FST
            EMFYETWEKFDPDATQFIAYS-RLSDFVDTLQEPLRIAKPNKIKLITLDPMPGDKIHC
            : : *      * * . :*:*:*:*: * . * : : : .*:*: :

Fbh56201pat
hSCN4A      -----
            LDYQDTTVHKLOELYEIVHVLSLMLEDLPOEKQP--SLEKVDEK-----
            LDILFALTKEVLGDSGEMDALKQTMEEKFMAANPSKVSYPITTTTLKRKHEEVCAIKIQR
            ** : :*: : * : . * * : : * . * * : .

Fbh56201pat
hSCN4A      -----

```

**Figure 3 (2 of 3)**

hSCN4A

AYRRHLLQRSMKQASYMYRSHDGSDDAPEKEGLLANTMSKMYGHENGNSSSPSPEEKG

Fbh56201pat  
hSCN4A

-----  
EAGDAGPTMGLMPISPSDTAWPPAPPPGQTVRPGVKESLV

**Figure 3 (3 of 3)**